

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT:

- (A) NAME: Pharmacia & Upjohn AB
(B) STREET: Lindhagensgatan 133
(C) CITY: Stockholm
(E) COUNTRY: Sweden
(F) POSTAL CODE (ZIP): S-112 87
(G) TELEPHONE: +46 8 695 80 00

(ii) TITLE OF INVENTION: Directed cytolysis of target cells, agents and compositions causing cytolysis, and compounds that can be used to produce the agents.

(iii) NUMBER OF SEQUENCES: 23

(iv) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 33 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

ATATAAGCTT CCACCATGGG CCACACACGG AGG

(2) INFORMATION FOR SEQ ID NO: 2:

(i) SEQUENCE CHARACTERISTICS:

- 5 (A) LENGTH: 35 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:

ACGCAGATCT TTAGTTATCA GGAAAATGCT CTTGC

35

(2) INFORMATION FOR SEQ ID NO: 3:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 39 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

TCAAAGCTTC TCGAGCGCGC TGTTATCAGG AAAATGCTC

39

(2) INFORMATION FOR SEQ ID NO: 4:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 46 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:

CGCGCGTCAG GCTAACGAAC TGCCAGGCGC CCGTCACAG AGACGA

46

10

(2) INFORMATION FOR SEQ ID NO: 5:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 60 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

15

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

25 AGCTTCGTCT CACGCGCGTT CTCCTGTGA CGGGGCGCCT GGCAGTTCGT TAGCCTGACG 60

(2) INFORMATION FOR SEQ ID NO: 6:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 32 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

30

35

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

TGGTACACCA CAGAAGACAG CTTGTATGTA TG

32

(2) INFORMATION FOR SEQ ID NO: 7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 32 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

CATACATACA AGCTGTCTTC TGTGGTGTAC CA

32

(2) INFORMATION FOR SEQ ID NO: 8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 33 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

CGAATAAGAA AGACGTCCTT GTTCAGGAGT TGG

33

(2) INFORMATION FOR SEQ ID NO: 9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 33 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

CCAAGTCCTG AACAGTGACG TCTTTCTTAT TCG

33

10

(2) INFORMATION FOR SEQ ID NO: 10:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 32 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

15

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

GAGATAATAA AGTTATTAAC TCAGAAAACA TG

32

25

(2) INFORMATION FOR SEQ ID NO: 11:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 32 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

30

35

(ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

CATGTTTTCT GAGTTAATAA CTTTATTATC TC

32

40

(2) INFORMATION FOR SEQ ID NO: 12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 49 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

15 CGCGGATCCG CGCGGCACCA GGCCGCTGTT ATCCGGAAAA TGCTCTTGC 49

(2) INFORMATION FOR SEQ ID NO: 13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 77 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

30 CCGGATAACA GCGCGCGTCA GGCTAACGAA CTCCCAGGCG CCCCGTCACA GGAAGAACGC 60

CCGCAGGTCC AACTGCA 77

(2) INFORMATION FOR SEQ ID NO: 14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 69 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

- (A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

GTGGACCTG CGGGCGTTCT TCCTGTGACG GGGCGCCTGG CAGTTCGTTA GCCTGACGCG 60

5 CGCTGTTAT 69

(2) INFORMATION FOR SEQ ID NO: 15:

10 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 18 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

15 (ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:

20 Ser Ala Arg Gln Ala Asn Glu Leu Pro Gly Ala Pro Ser Gln Glu Glu
1 5 10 15
Arg Ala

25 (2) INFORMATION FOR SEQ ID NO: 16:

(i) SEQUENCE CHARACTERISTICS:
30 (A) LENGTH: 18 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

35 (ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:

40 Ser Ala Arg Gln Ala Asn Glu Leu Pro Gly Ala Pro Ser Gln Glu Glu
1 5 10 15
Arg Pro

(2) INFORMATION FOR SEQ ID NO: 17:

(i) SEQUENCE CHARACTERISTICS:

- 5 (A) LENGTH: 84 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10 (ii) MOLECULE TYPE: other nucleic acid

(A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

15 GCGGATCCCG GTCCGCGTCA GGCTAACGAA CTGCCAGGAG CTCGGTCTCA GGAAGAGCGT 60
GCACCTACTT CAAGTTCTAC AAAG 84

20

(2) INFORMATION FOR SEQ ID NO: 18:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 38 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: other nucleic acid

30 (A) DESCRIPTION: /desc = "oligonucleotide DNA primer"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:

35 CCGAATTCGC TAGCTTATCA AGTTAGTGTT GAGATGAT 38

(2) INFORMATION FOR SEQ ID NO: 19:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 11 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:

5

Pro Ala Ser Gly Gly Gly Gly Ala Gly Gly Pro
1 5 10

(2) INFORMATION FOR SEQ ID NO: 20:

10

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 17 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

15

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:

20

Gly Pro Arg Gln Ser Asn Glu Thr Pro Gly Ser Pro Ser Gln Glu Glu
1 5 10 15

Arg

25

(2) INFORMATION FOR SEQ ID NO: 21:

(i) SEQUENCE CHARACTERISTICS:

30

(A) LENGTH: 17 amino acids

(B) TYPE: amino acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

35

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:

40

Gly Pro Arg Gln Ala Lys Thr Leu Pro Gly Ala Pro Ser Gln Thr Thr
1 5 10 15

Arg

(2) INFORMATION FOR SEQ ID NO: 22:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 17 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

10

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:

15

Gly Pro Thr Glu Ala Asp Glu Leu Pro Gly Ala Pro Ser Glu Glu Glu
1 5 10 15

Thr

20

(2) INFORMATION FOR SEQ ID NO: 23:

- 25 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 17 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

30 (ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:

35 Gly Pro Arg Gln Ala Asn Glu Leu Pro Gly Ala Pro Ser Gln Glu Glu
1 5 10 15

Arg